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State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

February 8, 2012

Brent R. Sumsion
Clyde Companies, Inc.
PO Box 1955
Orem, Utah 84059

Subject: Third Review of Notice of Intention to Commence Large Mining Operations, Sunroc Corporation, Levan Chicken Creek Mine, M/023/0016, Juab County, Utah

Dear Mr. Sumsion:

The Division of Oil, Gas and Mining has completed a review of your Notice of Intention to Commence Large Mining Operations for the Levan Chicken Creek Mine, which was received December 28, 2011. The attached comments will need to be addressed before tentative approval may be granted.

The Division asks that with the next review response you submit a complete copy of the plan. It has become difficult to determine which portions of the plan are current, superseded, or approved. For example, the submittal received July 31, 2007, contains Appendices A through F, but these are not listed in the current table of contents. Have they been superseded? The Division appreciates you flagging changes in the plan.

Please contact me at 801-538-5261 or Wayne Western at 801-538-5263 if you have questions about the review comments or if you would like to set up a meeting to discuss them. Thank you for your cooperation.

Sincerely,

Paul B. Baker
Minerals Program Manager

PBB: whw: eb

Attachment: Review

cc: twlloyd@fs.fed.us and tshore@fs.fed.us

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**THIRD REVIEW OF NOTICE OF INTENTION
TO COMMENCE LARGE MINING OPERATIONS**

**Sunroc Corporation
Levan Chicken Creek Mine
M/023/0016
February 8, 2012**

General Comments:

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
1	General	Submittal should be formatted to easily incorporate additional revisions and amendments.		
2	General	If the changes to the NOI will result in adding, replacing or removing changes to the current plan please use the form at https://fs.ogm.utah.gov/pub/mines/minerals_related/forms/MR-REV.pdf to show what changes will occur. If the changes will result in a new NOI please state so and include all supporting documents in the appendixes.		
3	General	Please write the plan as if the Division had approved the changes approved, and do not refer to permitted areas as proposed.		
4	Appendices	It is not clear how the IGES report is to be incorporated into the plan. It is not labeled as an appendix, and the list of appendixes in the table of contents does not reference it.	PBB	
5	Appendix 104-1	This appendix from the May 2009 submittal was empty, and no additional information was received with the most recent submittal.	PBB	

R647-4-104 - Filing Requirements and Review Procedures

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
6		Appendices B and D are missing from the IGES report.	lah WW	

R647-4-104 - Operator's, Surface and Mineral Ownership

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
7	Page 8	The telephone number for Brent Sumsion 801-208-6933 is incorrect. It should be 801-802-6933.	lah WW	

105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
8	Figure 110-1	Please provide actual cross sections that show the premining, operational and reclaimed phases for each pit and facilities area. Please include cross sections for areas that have had slides in the past. Also include cross sections for the new areas on the east pit.	WW	

R647-4-106 - Operation Plan

106.3 - Estimated acreages disturbed, reclaimed, annually

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
9	Page 16-17	This section does not provide a breakdown of the acreages to be disturbed or reclaimed annually. Will all 105 acres be disturbed the first year and no reclamation done until the end of mining operations? Please provide the required information.	Lk	

106.6 - Plan for protecting & re-depositing soils

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
10	Page 18	Please provide specific plans on how topsoil stockpiles will be protected. What will be used to revegetate stockpiles? Will signage or berms be used to protect the piles?	Lk	

The NOI contains data, comments, plans, etc under the R647-4-107 and R647-4-111 rules. These sections of the rules do not need to be addressed in the NOI: they are performance standards against which the Division will inspect the mine. The Division suggests that this part of the NOI be removed.

R647-4-109 - Impact Assessment

109.4 - Slope stability, erosion control, air quality, safety

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
11	Page 31 para 2	On page 31 the plan says slope stability will be monitored and modified to maintain a factor of safety of 1.3 to 1. This appears to be a typographical error that needs to be corrected, but if not, the Division will not accept a safety factor of 1.	lah	
12	Page 31 Para 2	The plan says, "... alluvial deposits ... to be sloped at a 2:1." This statement has two problems that need to be resolved. First, slope angles should be expressed using "H:V" units together with the numbers, e.g. 2H:1V. Second, the rest of the plan is written using English units, so as written the NOI indicates a 63-degree slope which is too steep for alluvium.	lah	
13	Appendix E	Appendix E is a letter is related to Seismic Monitoring, but there is no reference in the NOI to the content of the letter. Commit to either a schedule for monitoring, or a QC QA program for seismic monitoring, or justification why you would not monitor. Commit to a maximum peak particle velocity.	lah	

109.5 - Actions to mitigate any impacts

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
14		Due to the history of slope stability issues in the area, the Division requests a discussion of slope stability as it relates to public safety. Specifically discuss why the pit slope stability will not impact public safety.	lah	
15	Omission	Two geology maps have been included, but the orientation of the geologic units is not included on the maps or the text. Please include the orientation of the geologic units and how it relates to slope stability and public safety.	lah	

110.2 - Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
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Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
16	Section 110.2 pp 32	Please describe how the reclamation plan will enable the land use to be implemented. Specifically, how will the reclaimed area provide wildlife habitat and enhance recreation?	WW Lk	
17	Page 33	An operator has the right to modify (amend) the reclamation plan at any time, the plan must meet the requirements and standards of the rules and act. This page contains a statement that Sunroc reserves the right to negotiate changes in the plan to incorporate new technology or to avoid unreasonable economic burden. Please clarify what is meant by this statement as it references "unreasonable economic burden."	Lk	

110.4 - Description or treatment/disposition of deleterious or acid forming material

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
18	Page 34	Fuels, oils, lubricants, etc., are potentially deleterious materials. Please describe how these are used and stored, and include any spill prevention plans that are in place.	Lk	

110.5 - Revegetation planting program

Comm ent #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
19	Page 34	Please describe the minimum depth of ripping and the spacing between ripping teeth.	Lk	
20	Page 34	The plan to use straw or hay to improve organic content is not likely not provide the desired results. If used, how will the straw or hay be incorporated into the replaced soil? Also, two tons per acre will not significantly alter the organic matter content. The preferred (usually most economic) way to increase organic content is to apply biosolids or composted (weed free) manure at a rate of 5-10 tons per acre (based on the need as determined by soil analysis). The biosolids or compost would be applied to the replaced topsoil prior to ripping.	Lk	
21	Page 35	Since this operation is at least partially located on Forest Service lands, the Forest Service will need to approve the seed mix (not the BLM).	Lk	

R647-4-113 – Surety

Comment #	Sheet/Page/ Map/Table #	Comments	Initials	Review Action
22	113.3 pp 39	The surety amount is listed as \$397,0 which the Division assumes should have been \$397,000.00. The amount listed in the reclamation cost sheets is \$402,000.00. Please have all numbers match.	WW	
23	Bond Calculation s	Please change the header so the revised date is 2011 not 2008	WW	
24	Bond Calculation s	Please include blasting costs in the bond calculations. In 110.2, the procedure listed is to blast off the bench edges and use the material for fill.	WW	